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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/720,807

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EXAMINER

MOORE, MARGARET G

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,807

Applicant(s)

MILLARD ET AL.

Examiner

Margaret G. Moore

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 10, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 to 10, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. In view of applicants' amendments, the Examiner updated a search of the prior art. The following new grounds of rejection are made. The Examiner has opted to withdraw the previous rejections as it is unclear if the compositions therein have a putty-like consistency.

2. Claims 1 to 10, 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are considered to be indefinite because it is not clear what is embraced by the term "about". The Examiner notes that this term is given latitude but the exact degree of latitude is unclear.

MPEP 2173.05(b) states that:

The term "about" used to define the area of the lower end of a mold as between 25 to about 45% of the mold entrance was held to be clear, but flexible. *Ex parte Eastwood*, 163 USPQ 316 (Bd. App. 1968). Similarly, in *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), the court held that a limitation defining the stretch rate of a plastic as "exceeding about 10% per second" is definite because infringement could clearly be assessed through the use of a stopwatch. ***However, the court held that claims reciting "at least about" were invalid for indefiniteness where there was close prior art and there was nothing in the specification, prosecution history, or the prior art to provide any indication as to what range of specific activity is covered by the term "about." Amgen, Inc. v. Chugai Pharmaceutical Co., 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991).***

In this regard, the Examiner draws attention to the compositions Ruud et al. For instance see the composition known as the "standard formulation" prepared on column 6, line 60 and on. In this composition 9.3 grams of a silicone resin, 45.3 grams of a ceramic particle and 4 grams of a lubricant are combined with a solvent. Even giving the term "about" a degree of latitude the Examiner does not believe that this particular range is sufficient to anticipate and/or suggest the claimed composition. However Ruud et al. disclose many variations of this standard formulation. For instance column 10, line 38, discloses adjusting the ratio of primer to ceramic particle to about .36. Such a composition will contain about 24.8% silicone, 69% ceramic and 6% lubricant. The amount of silicone and ceramic fall well within the claimed ranges. In this instance it is

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unclear, given the breadth of "about", if 6% lubricant would meet or render obvious the claimed range. Also note the composition taught on column 10, line 20, in which the standard formulation is adjusted to have 40% less solvent and lubricant and that taught on column 10, line 38, in which the silicone to aggregate ratio is adjusted to .43%.

In general Ruud et al. teach various different compositions, in which each of the components either fall within the claimed range or just outside the claimed range. In view of the breadth and uncertainty of the term "about" it is unclear if such compositions meet and/or render obvious the instant claims.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 - 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stowell et al.

Stowell et al. teach a method of repairing a thermal barrier coating which comprises filling an area with a ceramic paste. See column 4, line 29 and on. This paste contains a ceramic powder and a silicone based binder. The ceramic powder is used in an amount of about 50 to 95 wt% and the powder to binder ratio is preferably 3:1.

With the range of 50 to 95 wt%, one having ordinary skill in the art would have found the selection of, for instance, 72 wt% of ceramic particles to have been obvious, as this is the middle point of the ceramic particle range in Stowell et al. Such a ceramic powder content will correspond to 24 wt% silicone. This results in a composition having the same amounts of ceramic particles and silica yielding liquids as claimed. Obviously, one can select other values within the teachings of Stowell et al. that will fall within the ceramic particle/silica yielding liquid ranges claimed.

Column 5, lines 7 and on, teach the addition of up to 10 wt% of an additive to ensure a proper consistency. This corresponds to a plasticizer. In view of this teaching

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one having ordinary skill in the art would have found a value of, for instance, 1 to 3 wt% obvious. In this manner Stovell et al. render obvious a composition having each of the claimed components in the claimed amounts. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. doesn't require undue experimentation).

While not specifically teaching a putty like composition that is capable of being rolled into a cylinder, a paste is comparable in consistency and properties to a putty. Though Stowell et al. do not specifically teach that the composition is capable of being rolled into a cylinder, the fact that it is referred to as a paste, that it is applied with a trowel (column 5, line 17) and that it has the same ratio of ceramic particles and silica yielding liquids leave one with a reasonable expectation that this claimed property will inherently be met by the composition in Stowell et al.

For claim 2, see column 4, line 37. The bottom of column 3 teaches a particle size range that overlaps with that in claim 3. The top of column 5 teaches alcohols meeting claims 9 and 10. They are added in an amount sufficient to dissolve the binder. Column 5, line 33, teaches that the silicone binder forms silica upon heating.

5. Claims 1, 2, 4 to 10, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacDougald et al.

MacDougald et al. teach a method for manufacturing dental restorations. As can be seen from the second paragraph of the abstract, this includes a homogeneous composition in which a ceramic powder is in combination with a media material. See for instance Example 1 on column 8. This prepares a putty like composition that is non-sticky, soft and workable. From this it would appear that such a putty meets the capable of being rolled into a cylinder limitation. This composition contains 75 wt% of a ceramic particle and 25 wt% of a silicone composition. This meets the claimed amounts of ceramic particles and silica yielding particles, given the fact that "about 72" wt% overlaps with 75 wt%. See also column 7, lines 5 and on, which teaches ranges for both the ceramic particles and media material that overlap with and embrace that claimed.

Example 1 differs from that claimed in that it does not include a plasticizer. Column 7, line 45 and on, teaches that it is important to include a dispersing agent to enhance dispersion of the particles within the media system and to improve the flow of the feedstock. While not specifically teaching the claimed range, again note that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art please note that when the general conditions of a composition are disclosed. With this in mind, the skilled artisan would have found the claimed composition to have been obvious.

See the top of column 7 which teaches alumina, meeting claim 2. See column 4, lines 53 and on, which teach various silicones, including non-curing ones. Note too Example 3 which uses such a silicone. This meets claim 5. Column 4, line 50, teaches using an amount of solvent sufficient to facilitate the blending/mixing of the silicone and powder. From this one having ordinary skill in the art would have been motivated to determine the operable amount of solvent, rendering obvious claim 6. On the other hand, for claims 9 and 10, note that claim 1 does not specifically require that a solvent be present if the composition can be mixed and is pliable on its own. Thus one can read the solvents in claims 9 and 10 as being optional.

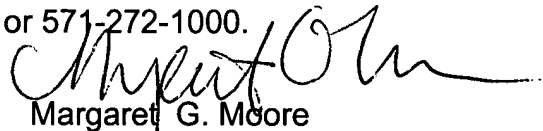
6. Zucker et al. is cited as being of general interest. This reference teaches a paste having a mixture of a silicone resins and fillers, but fails to teach or suggest the addition of a plasticizer.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
10/30/06